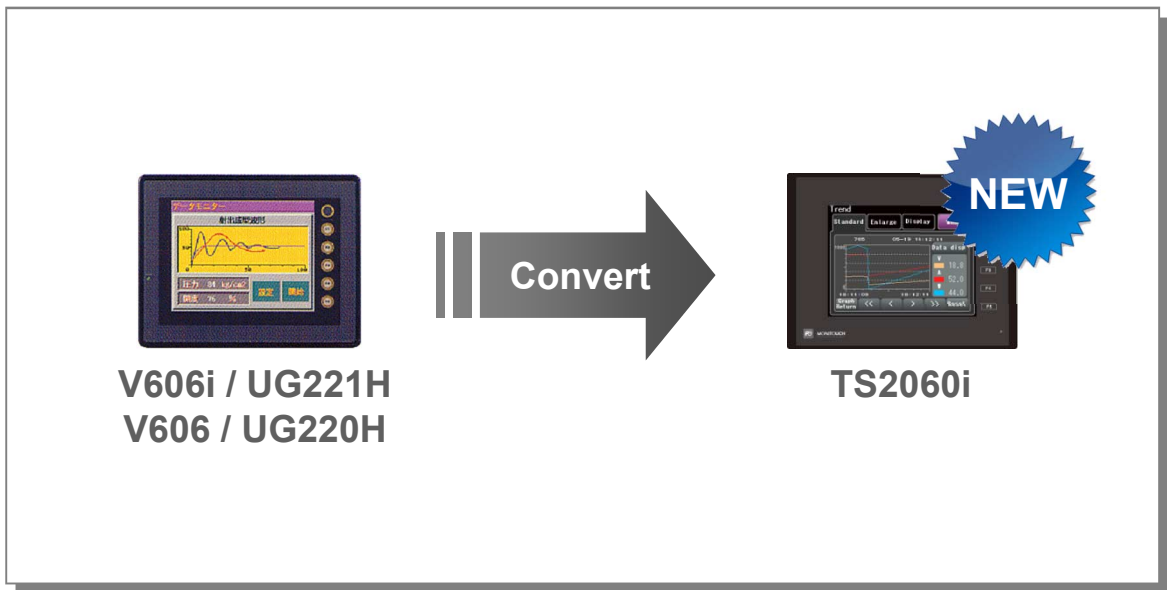


TECHNOSHOT

TS2060 Replacement Guidance

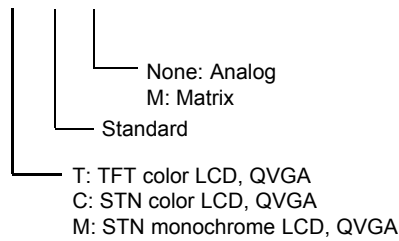
- V606i / UG221H > TS2060i
- V606 / UG220H > TS2060i



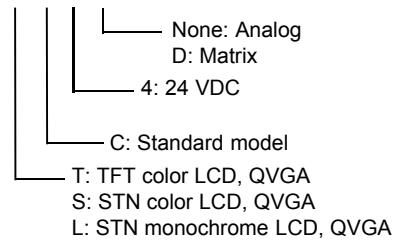
- V606i/UG221H series

- Models

V606i□10□



UG221H-□C4□



- Main differences

	V606i series/UG221H series		
	V606iT10(M) UG221H-TC4(D)	V606iC10(M) UG221H-SC4(D)	V606iM10(M) UG221H-LC4(D)
Front view			
External dimensions (mm)			
Panel cut-out dimensions (mm)			
Display device	TFT color	STN color	STN monochrome
Colors	16 colors		8-level grayscale
Effective display area	5.7-inch		
Resolution	320 × 240 dots		
Memory	FROM	760 KB (expandable to 4 MB by using an expansion memory)	
	SRAM	None (512 KB available by using an SRAM cassette)	
Touch switch	Analog / matrix *1		
Comm. I/F	Serial	CN1	D-sub 25-pin: RS-232C / RS-422/485
		MJ1	Modular jack 8-pin: RS-232C / RS-485 (2-wire)
		MJ2	Modular jack 8-pin: RS-232C / RS-485 (2-wire)
	Ethernet	1CH (with the relevant optional unit *2 attached)	
Network	Communication unit: CU-xx / UG03I-x		
Storage device	Dedicated memory card *3		
Power supply	24 VDC		
Power supply terminal block shape *4	Spade/ring terminal, Screw drive: Phillips		

Recommended models for replacement	
TS2060i	
TFT color	
Color: 65,536 colors Monochrome: 16-level grayscale	
5.7-inch	
320 × 240 dots	
10.5 MB	
512 KB	
Analog *5	
D-sub 9-pin (with "DUR-00" attached) *6: RS-232C / RS-422/485	
Modular jack 8-pin: RS-232C / RS-485 (2-wire)	
Modular jack 8-pin: RS-232C / RS-422 (4-wire)/485 (2-wire)	
1CH (Auto-MDIX)	
Communication unit: CUR-xx	
SD/SDHC card (built-in slot)	
24 VDC	
Pin terminal, Screw drive: Slot	

*1 V606iX10M, UG221H-xxxD: Matrix switch

*2 V606i: CU-03, UG221H: UG03I-E

*3 V606i: CREC, UG221H: UG00P-MR

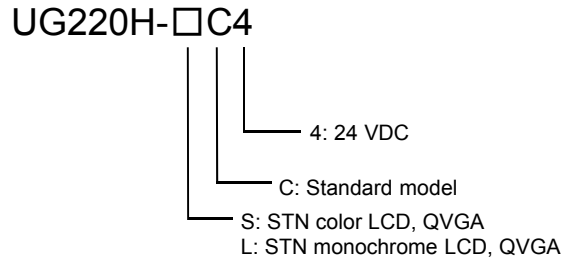
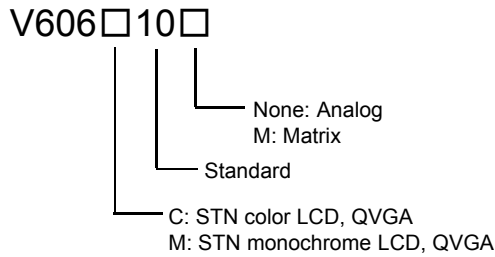
*4 For details, refer to page 4.

*5 Two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.

*6 When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".

- V606 series/UG220H series

- Models



- Main differences

		V606 series/UG220H series	
		V606C10(M) UG220H-SC4	V606M10(M) UG220H-LC4
Front view			
External dimensions (mm)			
Panel cut-out dimensions (mm)			
Display device		STN color	STN monochrome
Colors		16 colors	8-level grayscale
Effective display area		5.7-inch	
Resolution		320 × 240 dots	
Memory	FROM	760 KB	
	SRAM	None	
Touch switch		Analog / matrix *1	
Comm. /IF	Serial	CN1	D-sub 25-pin: RS-232C / RS-422/485
		MJ1	Modular jack 8-pin: RS-232C / RS-485 (2-wire)
		MJ2	Modular jack 8-pin: RS-232C / RS-485 (2-wire)
	Network	Communication unit: CUS-xx / UG021-x	
Storage device		Dedicated memory card *2	
Power supply		24 VDC	
Power supply terminal block shape *3		Spade/ring terminal, Screw drive: Phillips	

		Recommended models for replacement
		TS2060i
		TFT color
		Color: 65,536 colors Monochrome: 16-level grayscale
		5.7-inch
		320 × 240 dots
		10.5 MB
		512 KB
		Analog *4
		D-sub 9-pin (with "DUR-00" attached) *5 : RS-232C / RS-422/485
		Modular jack 8-pin: RS-232C / RS-485 (2-wire)
		Modular jack 8-pin: RS-232C / RS-422 (4-wire)/485 (2-wire)
		Communication unit: CUR-xx
		SD/SDHC card (built-in slot)
		24 VDC
		Pin terminal, Screw drive: Slot

*1 V606x10M: Matrix switch

*2 V606: CREC, UG220H: UG00P-MR

*3 For details, refer to page 4.

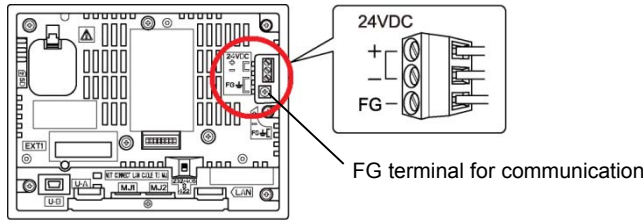
*4 Two points on the screen cannot be pressed simultaneously. For two-point pressing, use a switch on the screen and a function switch.

*5 When using the existing cable, use Hakko Electronics' conversion cable "D9-D25".

- Power supply terminals

The shape of the terminal block differs. If the power supply cable is connected with a spade or ring terminal, the end of the cable must be modified.
Connect the frame ground (FG) wire for communication to the FG terminal for communication.

- TS2060



* A flat-head screwdriver is necessary to tighten the screws for the power supply terminals.
Recommended screwdriver: SZS 0.6 × 3.5 (Phoenix Contact)

· Power supply cable specifications

When directly connecting the cable	Power supply cable: AWG 18 to AWG 14, stranded wire/solid wire (diameter: 1.0 to 1.6 mm) FG wire: AWG 20 to AWG 14 Stranded wire/solid wire (diameter: 0.8 to 1.6 mm)
When using pin terminals	Recommended pin terminal: AI 0.75-6 GY, AI 1-6 RD, AI 1.5-6 BK (Phoenix Contact's pin type) Recommended crimping tool: CRIMPFOX 6 (Phoenix Contact)

- Screen program transfer

<p>[V606(i)/UG22xH]</p>	<p>V-CP (RS-232C)</p> <p>Modular jack 8-pin — D-sub 9-pin</p>	<p>V-SFT-5 (Ver. 5) Windows 98SE / NT4.0 / Me / 2000 / XP / XP 64 Edition / Vista (32bit, 64bit) / 7 (32bit, 64bit) / 8 (32bit, 64bit) / 8.1 (32bit, 64bit) / 10 (32bit, 64bit)</p>
<p>[TS2060i]</p>	<p>USB-miniB — USB-A</p> <p>Modular jack 8-pin — D-sub 9-pin</p> <p>Ethernet</p>	<p>V-SFT-6 (Ver. 6.0.16.0 or later) Windows XP / XP 64 Edition / Vista (32bit, 64bit) / 7 (32bit, 64bit) / 8 (32bit, 64bit) / 8.1 (32bit, 64bit) / 10 (32bit, 64bit)</p>

* Screen programs can also be transferred by using an SD card or USB flash drive.
* The LAN port of TS2060i is compatible with Auto-MDIX. Both straight and cross cables are usable in either presence or absence of a hub.

- Screen program conversion

The V606(i)/UG22xH screen program can be converted to the TS2060i screen program by using V-SFT-6 (screen configuration software). When a V606(i)/UG22xH screen program is opened on V-SFT-6, the [Edit Model Selection] window is displayed. Select "TS2060i".
For details, refer to the TS2060 File Conversion Manual.

* The indicated recommended model for replacement can be used with minimal restrictions. Please note that other models not described here can also be used; make a selection according to your system requirements.

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